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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,382	12/08/2003	Hiroshi Ito	Q78803	8151
23373	7590	01/26/2006		
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			EXAMINER BEATTY, ROBERT B	
			ART UNIT	PAPER NUMBER
			2852	

DATE MAILED: 01/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

B/C

**Office Action Summary**

Application No.

10/729,382

Applicant(s)

ITO ET AL.

Examiner

Robert Beatty

Art Unit

2852

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 November 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-39 is/are pending in the application.  
 4a) Of the above claim(s) 40-42 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4,8,31-33,35,37 and 38 is/are rejected.
- 7) ☒ Claim(s) 2,3,5-7,9-30,34,36 and 39 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

1. Claims 40-42 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 11/4/2006.

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

3. Claims 1-34 are objected to because of the following informalities:

In claims 1-34, the applicant calls for a "secondary" transfer member which is not clear in that a first or "primary" transfer member has never been mentioned. Appropriate correction is required.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 35 and 38 are rejected under 35 U.S.C. 102(b) as being anticipated by Ryusaki et al. (JP# 08-114995).

Ryusaki et al. teach an image forming apparatus comprising a photosensitive member 1, a developing device 6 for developing a latent image into a toner image, a intermediate transfer belt 2, a primary transfer roller 7 for transferring the toner

image from the photosensitive drum to the intermediate transfer belt, a secondary transfer roller 9 for transferring the toner image from the intermediate transfer belt to a recording sheet. A cleaning blade 3 will come into contact with the intermediate transfer belt in order to clean residual toner from the belt. As can be seen in Fig. 5 for example, the cleaning blade contacts the edge of the belt first.

5. Claims 31-32 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamazaki (JP# 11-288178).

Yamazaki teach an image forming apparatus comprising a photosensitive drum 10, an intermediate transfer belt 20, a primary transfer roller 15 and a secondary transfer roller 38 for transferring a toner image from the intermediate transfer belt to a recording sheet. The intermediate transfer belt has a multi-layer structure with one edge being an electrode. A contacting mechanism keeps the secondary transfer roller in contact with the belt at least at the electrode edge portion.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamazaki (JP# 11-288178) in view of Sameshima.

Yamazaki taught supra discloses most of what is claimed except the secondary transfer roller being made of an elastic material. Sameshima teach an image forming apparatus comprising a photosensitive drum 1, an intermediate transfer belt 5, a primary transfer roller 5j for transferring a toner image from the photosensitive drum to the intermediate transfer belt, and a secondary transfer roller 11 for transferring the toner image from the intermediate transfer belt to a recording sheet. The secondary transfer roller is made of elastic sponge (col.10, lines 41-44). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the secondary transfer roller made of an elastic because a wide transfer nip can be formed with the intermediate belt which will improve transfer of the toner to the recording sheet.

7. Claims 1,4,8,37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ryusaki et al. (JP# 08-114995). in view of Sameshima.

Ryusaki et al. taught supra discloses most of what is claimed except the secondary transfer roller contacting the intermediate transfer belt at a widthwise end portion first. Additionally, the transfer belt having a seam is not taught. Sameshima teach an image forming apparatus comprising a photosensitive drum 1, an intermediate transfer belt 5, a primary transfer roller 5j for transferring a toner

image from the photosensitive drum to the intermediate transfer belt, a cleaning blade 5e which contacts and separates from the intermediate transfer belt, and a secondary transfer roller 11 which contacts/separates from the intermediate transfer belt for transferring the toner image from the intermediate transfer belt to a recording sheet. It would have been obvious to one of ordinary skill in the art at the time the invention was made to also contact the transfer belt at a widthwise edge first with the secondary transfer roller as was done with the cleaning blade in Ryusaki et al. because load variations during image formation can be lessened as taught in Ryusaki et al. In addition, the examiner takes Official Notice that forming an intermediate transfer belt with a seam is very well known in the art for ease of manufacture.

8. Claims 2-3,5-7,9-30,34,36,39 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Choi, Kopp et al., Ihara (JP), and Matsuzaki (JP) all appear relevant to the claimed invention.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Beatty whose telephone number is (571) 272-2130. The examiner can normally be reached on M-F from 9 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Arthur Grimley, can be reached on (571) 272-2136. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Robert Beatty', with a long horizontal line extending from the end of the signature towards the right margin.

Robert Beatty  
Primary Examiner  
Art Unit 2852